

**General Periodicity**  
August T. Jaccaci Feb. 2006  
**Nature's Creative Fractal Dynamics**

I first met John A. Gowan at the 1980 session of the Creative Problem Solving Institute. He presented his chart "Organization of Nature" to the general systems study group. I was immediately impressed with the depth and breadth of John's knowledge of pattern and process running all the way from the primal photon to the whole primordial universe. The fact that there was an evolutionary progression in each of the twelve horizontal lines running through his chart of natural organization proceeding from unit to pair to group to compound new unit caught my attention right away.

By that time, having worked with George Land and studied his three progressive stages of growth he called Accretive, Replicative and Mutualistic, I had renamed the stages Gather, Repeat, Share and Transform (GRST) for easier comprehension. George had shown how the mutualistic stage was transformative as the new accretive stage emerged from it. However, I found repeatedly in using his sequential dynamics that transformation was a stage and a dynamic complete and necessary unto itself. Transformation is usually very short in duration compared to the other three. Yet, just as the winged butterfly emerging from the cocoon is distinct from the caterpillar, the progression of any form of life or activity into a new higher order form needs its own stage, state and time in the sun to carry the cycle forward at a new level. Transformation creates a new often unexpected more complex and capable unit of identity, what John calls a compound new unit.

I saw the new fourth stage of transformation completing the growth dynamic progression. I saw this stage universally present in all growth, development and evolution to higher order all throughout nature. From that different perspective, I also saw the isomorphic relationship between John's four stage process and mine because they were identical in the structure of their process. The unit did the gathering (G) of form; the pair did the repeating (R) of similarity and complementarity; the group did the sharing (S) of differences; the compound new unit did the transformation (T) to a new higher order identity, capability and potential. I mapped John's four stage chart and my GRST map together. Later that year, John added the GRST stages across the top of our now jointly created and understood chart of ordering and growth throughout all organization in nature.

The next year at CPSI I had the new chart in my hands while listening to John lecture about it. For some reason unknown to me, I turned the chart sideways rotating it 90 degrees. And suddenly there it was. I discovered that the whole chart, the whole order in nature was itself, written universe-large, a gather, repeat, share, transform process. The Microphysical stage of four levels from photon to DNA was the gathering stage of the universe. The Biophysical stage of life as we now know it from the cell to Gaia was the repeating stage. The Astrophysical stage from planet to universe was the cosmic sharing stage, and the yet to be discovered Metaphysical and Archetypal stage was the creative transformation stage of the whole cosmos. I found that the whole progressive ordering in nature ran both ways on the chart horizontally and vertically. The order was a fractal pattern; it was self-similar in creative process everywhere at every scale in time and space, from the formation of minute momentary particles to the birth and life of the whole universe itself.

The next year I read a wonderful book, *Mendeleyev.. Prophet of Chemical Elements*, by Peter Kelman and A. Harris Stone. Therein, I learned that Mendeleyev had arrayed all the known chemical elements on cards in horizontal rows he called chemical families or natural groups which he first placed on his desk and later pinned to the wall. As these family rows were added underneath each other, he found an order of ascending atomic weight running both vertically and horizontally in his emerging table. From this discovery, Mendeleyev knew he had found a natural law which he called Periodic Law, the periodic law of chemical elements. This new law positioned Mendeleyev in a new stratum of discovery beyond other chemical

researchers such as de Chancourtois, Newlands and Meyer.

John and I had found the same double progressive integrity running both ways throughout all levels of increasing order in the universe that Mendeleev had found to help him chart the special formative ordering of chemical elements. That year we also put GRST down the vertical edge of the Organization of Nature chart as well as across the top as we had already begun. I began to call our chart a General Periodic Table of Everything wherein the periodic table of chemical order was arrayed within the second level of our [microphysical realm](#) of what I now call General Periodicity.

Next I created an empty map I named the Metamatrix in order to make general periodicity available as a creative thinking and ordering tool for analysis, prediction and planning in any and all subjects and domains of consideration. The map is an open information set of our GRST columns with four rows of GRST stages rising vertically within each column in the form of a square made up of [sixteen internal squares](#). By the nature of the fractal creative process of order within order, I could have placed more squares of self-similar iterations within each of the sixteen small squares. Each square would have its own sixteen distinct creative dynamics. However, that level of complexity would have begun to diminish the practical use, learning and application of general periodicity.

I then placed the entire square containing sixteen squares at the right side of a [golden rectangle](#). With the golden spiral arcing through the square, I suggested that any process of general periodic thinking and mapping using this thought tool would naturally progress, transform, evolve and map into a whole new domain of higher order consideration and influence.

I have used this Metamatrix map for over twenty years of teaching, consulting, planning and designing in a wide variety of domains such as business, banking, clothing, education, food, forest products, communication, government, real estate and a host of others, all providing valuable information on how general periodicity manifests in human creative endeavors and how that insight can help determine areas of future growth and success. However, far and away the most fascinating application and consideration over these years of mapping general periodicity is its dynamic at work in human individual and [human species life](#).

[metamatrix.html](#)

Please use the URL <http://www.webcitation.org/5YOCTDJ72> to access a cached copy of this page

If you have any questions, please feel free to contact the WebCite team at <http://www.webcitation.org>